

Eleventh International ISDG Workshop

Warsaw, July 13-15, 2017

Program

Workshop is held at

Institute of Mathematics, Polish Academy of Sciences

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International Society of
Dynamic Games

ISDG



UNIwersytet
Warszawski

Thursday, July 13

8:00 – 8:45 **Registration**

8:45 – 9:00 **Welcome Address**

9:00 – 10:00 **Invited Talk 1. Chair: A. Jaśkiewicz**

The Large Space of Information Structure

J. Renault

10:00 – 10:30 **Break**

10:30 – 12:30 **Contributed Sessions**

TA1 **Dynamic Games in Environmental and Resource Economics I, Chair: F. Wagener**

Abatement Investment by a Monopoly with a Stock Pollutant

G. Martín-Herrán, S. Rubio

Sustainability of Social Optima and Nash Equilibria in a Differential Game of Resource Extraction

F. Ali Mohammed Al-hag, A. Wiszniewska-Matyskiel

Verification and Refinement of Two Species Fish Wars Model

O. Górniewicz, A. Wiszniewska-Matyskiel

Stable Partial Cooperation In Managing Ecological Systems with Tipping Points

F. Wagener, A. de Zeeuw

TA2 **Dynamic Games Theory I, Chair: L. Petrosyan**

On Differential Games with Random Time Horizon and a Discrete Structure of the Probability Distribution

E. Gromova, A. Malakhova

The Recursive Bargaining Solution for NTU Differential Games

S. Hoof

Strongly Time-Consistent Solutions in Cooperative Differential Games with Infinite Duration

L. Petrosyan

12:30 – 14:00 **Lunch**

14:00 – 16:00 **Contributed Sessions**

TB1 **Dynamic Games in Management Science and Economics I, Chair: P. De Giovanni**

Evolution of Customers' Quality Expectations: Who Tends to Be the Satisfied in the Long Run?

G. E. Fruchter, T. Reutterer

Planned Opaqueness in Securitization

T. Sogo, K. Kawai

Time-Consistent Equilibria in Cooperative Advertising in Supply Chain Management

L. Lu, J. Marín-Solano, J. Navas

Supply Chain Coordination with Dynamic Sharing Parameters

P. De Giovanni

TB2 **Stochastic Games, Chair: Ł. Stettner**

Node-Consistent Shapley Value for Games Played over Event Trees with Random Terminal Time

E. M. Parilina, G. Zaccour

Markov Perfect Equilibria in OLG Models with Altruism with Paternalistic and Nonpaternalistic Features

Ł. Balbus

Existence of Nash Equilibria in Stochastic Games with Risk Sensitive Agents

H. Asienkiewicz, Ł. Balbus

Markov Perfect Equilibria in Dynamic Decision Model with Quasi-Hyperbolic Discounting

Ł. Balbus, A. Jaśkiewicz, A.S. Nowak

16:00 – 16:30 Break

16:30 – 17:30 **Invited Talk 2. Chair: K. Szajowski**

Dynamic Network Formation Models with Strategic Interactions

A. Rusinowska

19:00 **Welcome Reception**

Friday, July 14

9:00 – 10:30 **Contributed Sessions**

FA1 Dynamic Games in Environmental and Resource Economics II, Chair: G. Martín-Herrán

A Common Property Resource Dynamic Game with Stock Dependent Utilities and Asymmetric Players

A. Castaer, J. Marin-Solano, C. Ribas

Stackelberg Games of Water Extraction

A. Jean-Marie, M. Tidball

On Spatial Effects in Cooperative and Non-Cooperative Transboundary Pollution Dynamic Games

J. De Frutos, G. Martín-Herrán

FA2: Stopping Games, Chair: E. Z. Ferenstein

Zero-Sum Discounted Markov Games with Impulse Controls

A. Basu, Ł. Stettner

A Multilateral Stopping Model

K. Szajowski

Multi-Person Stopping Games with Priorities and Optimal Multi-Stopping Time Problems

E. Z. Ferenstein

10:30 – 11:00 Break

11:00 – 13:00 **Contributed Sessions**

FB1: Applications of Dynamic Games, Chair: V.L. Turova

A Stackelberg Duopoly Model with Sticky Prices and Myopic Follower

K. Kańska, A. Wiszniewska-Matyszkiewicz

Dynamic Games with Incomplete Information Applied to Optimization of Military Radio Networks – Jamming Avoidance

A. Wiszniewska-Matyszkiewicz, P. Kaniewski, R. Matyszkiewicz

Dynamic Games in Biomedical Problems

N.D. Botkin, V.L. Turova

FB2 Dynamic Games Theory I, Chair: V.V. Mazalov

Numerical Method Solving Time-Optimal Differential Games with Life Line

N.V. Munts, S.S. Kumkov

Differential Games with Incomplete Information and with Revealing on an Absorbing Target Sets

X. Wu

Lion-and-Man Game and Fixed Points

O. Yufereva

Discrete-Time Dynamic Potential Games

V.V. Mazalov, A. Rettieva

13:00 – 14:00 Lunch

Afternoon: Excursion and Cultural Event

19:30 Workshop Dinner

Saturday, July 15

9:00 – 10:00 Invited Talk 3. Chair: A. Wiszniewska-Matyszek

Fisheries Games

M. Lindroos

10:00 – 10:30 Break

10:30 – 12:30 Contributed Sessions

SA1: Dynamic Games in Management Science and Economics II, Chair: F. Lamantia

Depreciation Rate and Market Potential in the Lanchester Model

D. Machowska

Cooperative vs. Non-Cooperative Approach to Differential R&D Game: Endogenous Uncertainty as the New Market Inefficiency Source

A. Bondarev

Time Consistent Risk Management in a Defined Benefit Stochastic Pension Fund

R. Josa-Fombellida, J. Navas

The Dynamic Effects of Fiscal Reforms and Tax Competition on Tax Compliance and Migration: an Evolutionary Analysis

F. Lamantia, M. Pezzino

SA2 Evolutionary and Population Games, Chair: V. Kolokolsov

Stability in Evolutionary Games and Population Games

D.E.A. Fryer

Stability in Replicator Dynamics Derived from Transferable Utility Games

A. Casajus, M. Kramm, H. Wiese

On a Large Population Game of Associative Pairing with Continuous Time

D.M. Ramsey

Mean-Field and Evolutionary Game Modeling on Networks

V.N. Kolokolsov, S. Katsikas

12:30 – 14:00 **Lunch**

14:00 – 16:00 **Contributed Sessions**

SB1 **Dynamic Games Theory, Chair: S. Plaskacz**

On General Limit Value Function

D. Khlopin

Network Partitioning as Cooperative Game

K.E. Avrachenkov, V.V. Mazalov

McKean -Vlasov SPDEs for the Mean Field Games with Multidimensional Common Noise

V.N. Kolokoltsov, M. Troeva

Dynamical Systems Associated to the ϵ -Core in the Repeated Prisoner's Dilemma

S. Plaskacz, J. Zwierzchowska

SB2 **Dynamic Games in Environmental and Resource Economics III, Chair: M. Breton**

Enforcing Regulatory Standards In Stock Pollution Problems

C. Arguedas, F. Cabo and G. Martín-Herrán

Linear Quadratic Game of Exploitation of Common Renewable Resources with Inherent Constraints

R. Singh, A. Wiszniewska-Matyszkiewicz

Adaptation in the Transboundary Pollution Dynamic Game

B. Vardar, G. Zaccour

The Impact of Adaptation on the Stability of International Environmental Agreements

M. Breton, L. Sbragia

16:00 – 16:15 **Closing Session**